



# FACSIMILE

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U.S.P.T.O. Group Art Unit: **1631**  
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- 1) Copy of Auto-Reply Facsimile Transmission from USPTO dated August 11, 2004
- 2) Copy of Facsimile coversheet to Examiner Ardin H. Marschel dated August 11, 2004 from Jeffrey H. Rosedale
- 3) Copy of Communication Regarding Information Disclosure Statement dated and signed August 11, 2004
- 4) Clean copy of the Form PTO-1449 for your signature of reference lettered EN

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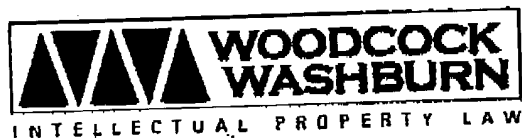
<p><b>WOODCOCK WASHBURN</b> INTELLECTUAL PROPERTY LAW</p>		<p>T-100 P.001 F-342</p> <p>One Liberty Place, 46th Floor Philadelphia, PA 19103 215-568-3100 Fax: 215-568-3439</p> <p>Search 1000 Third Avenue, Suite 1000 Seattle, WA 98106 206-332-1300 Fax: 206-332-1311</p>
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Normand Herbert

Application No.: 08/973,381

Filing Date: March 25, 1998

For: OLIGOMERIC AMINODIOL-CONTAINING COMPOUNDS, LIBRARIES  
THEREOF, AND PROCESS OF PREPARING THE SAME

Confirmation No.: 6836

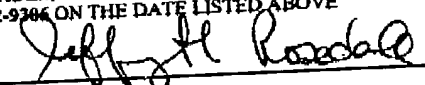
Group Art Unit: 1631

Examiner: Ardin H. Marschel

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DATE: August 11, 2004

I HEREBY CERTIFY THAT THIS PAPER IS BEING  
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Jeffrey H. Rosedale  
Reg. No. 46,018

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

COMMUNICATION REGARDING  
INFORMATION DISCLOSURE STATEMENT

- ☐ In the Office Action dated , the Examiner indicated that references were not considered because copies of those references were not found in the parent application file. Enclosed are copies of references that were listed on the PTO Form 1449 originally filed , a copy of which is attached to this communication. A copy of the date-stamped postcard dated is also attached. Accordingly, Applicants believe no fee is due for providing copies of these references.
- ☒ Initialed copies of the 1449 sent with the Information Disclosure Statement dated December 15, 1998, were attached to the Official Action dated August 1, 2000. However, Applicants note that the Examiner did not initial and/or sign Page 11

Page 1 of 2

**PATENT**

**DOCKET NO.: ISIS-2297**

(reference letter EN of the PTO-1449. As this appears to be an administrative oversight, it is respectfully requested that the Examiner initial and date this page of the 1449 confirming that the references citing thereon have been considered. A clean copy of the PTO-1449 is enclosed for the Examiner's convenience along with a PTO date-stamped copy of the Returned Postcard.

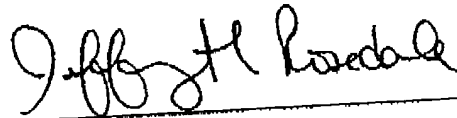
Further, applicants would like to advise the Examiner that the following U.S. Serial Numbers have issued since the filing of the Information Disclosure Statement referenced above:

**Serial Number**

**Patent Number**

The Commissioner is authorized to charge payment of any fees associated with this communication and to refund any overpayment associated with this communication or during the pendency of this application to deposit account 23-3050.

Date: August 11, 2004

  
\_\_\_\_\_  
Jeffrey H. Rosedale  
Registration No. 46,018

WOODCOCK WASHBURN LLP  
One Liberty Place - 46th Floor  
Philadelphia, PA 19103  
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**Applicant(s):** Normand Herbert

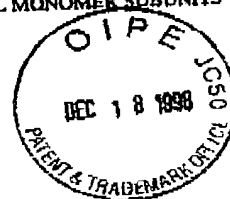
**Title:** COMBINATORIAL LIBRARIES HAVING AMINODIOL MONOMER SUBUNITS

**Serial No.:** 08/973,381

**Filed:** March 25, 1998

**Docket No.:** ISIS-2297 (MPS/jjkeeler)

**Date Sent:** December 15, 1998



DOCKET NO.: ISIS-2297

PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

## In Re Application of:

Normand Herbert

Serial No.: 08/973,381

Group Art Unit: Not Yet Assigned

Filing Date: March 25, 1998

Examiner: Not Yet Assigned

For: COMBINATORIAL LIBRARIES HAVING AMINODIOL MONOMER  
SUBUNITSDate of deposit: December 15, 1998

I hereby certify that this paper is being deposited with the United States Postal Service as First Class Mail, postage prepaid on the date indicated above and is addressed to the Assistant Commissioner for Patents, Washington, DC 20231.

Michael P. Straher  
Typed Name: Michael P. Straher  
Registration No.: 38,325

Assistant Commissioner for Patents  
Washington DC 20231

Dear Sir:

## INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §§1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 C.F.R. §1.56(b).

- ☒ In accordance with §1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of the above identified application as set forth in §1.491, or before the mailing date of a first Office Action on the merits of the above-identified application, no additional fee is required.

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## PATENT

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- 2 -

- ☐ In accordance with §1.129(a), this Information Disclosure Statement is being filed in connection with ☐the first or ☐second After Final Submission, therefore:
- ☐ Certification in Accordance with §1.97(e) is attached; or
- ☐ The fee of \$240.00 as set forth in §1.17(p) is attached.
- ☐ In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in §1.97(b) above but before the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311, therefore:
- ☐ Certification in Accordance with §1.97(e) is attached; or
- ☐ The fee of \$240.00 as set forth in §1.17(p) is attached.
- ☐ In accordance with §1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311 but before the payment of the Issue Fee, therefore included are: Certification in Accordance with §1.97(e); Petition Requesting Consideration of the Information Disclosure Statement; and the fee of \$130.00 as set forth in §1.17(i)(1).
- ☐ Copies of each of the references listed on the attached Form PTO-1449 are enclosed herewith.
- ☒ Copies of references listed on the attached Form PTO-1449 are enclosed herewith EXCEPT THAT:
- ☒ In view of the voluminous nature of references BG, BJ, BZ, CD, and CL, and the likelihood that these references were available to the Examiner, copies were not enclosed in prior application Serial No. 08/180,134.

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PATENT

- ☒ In accordance with §1.98(d), copies of the following references listed on the attached Form PTO-1449 are not enclosed herewith because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application(s) for which a claim for priority under 35 U.S.C. §120 have been made in the instant application:
- ☒ Copies of references AA-BE, DM-DN, and DW-EG listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior application Serial No. 08/483,311, filed June 7, 1995; Copies of references BF-DD and DO-DQ listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior application Serial No. 08/180,134, filed January 11, 1994 (reference copies are also attached with this filing); Copies of references DE-DL, DR-DV, and EH-EO listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior application Serial No. 08/179,970, filed January 11, 1994 (reference copies are also attached with this filing).
- ☒ If any of the foregoing publications are not available to the Examiner, Applicant will endeavor to supply copies at the Examiner's request.

Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050.

This form is submitted in duplicate.

There are no listed references which are not in the English language.

Date:

December 15, 1998

Michael P. Straher

Registration No. 38,325

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Sheet 1 of 11

<b>Form PTO-1449 Modified</b>  List of Patent and Publications Cited by Applicant (Use several sheets if necessary)  U.S. Department of Commerce Patent and Trademark Office		Docket No. <b>ISIS-2297</b>	Serial No. <b>08/973,381</b>
		Applicant <b>Normand Herbert</b>	
		Filing Date <b>March 25, 1998</b>	Group <b>Not Yet Assigned</b>
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>			
	AA	Atherton et al., "The Fluorenylmethoxycarbonyl Amino Protecting Group", Chapter 1 in <u>The Peptides</u> , Gross and Meienhofer, Eds., Academic Press, New York, 1987, 9, 1-38	
	AB	Augustyns, K. et al., "Influence of the Incorporation of (S)-9-(3,4-dihydroxy-butyl)adenine on the Enzymatic Stability and Base-Pairing Properties of Oligodeoxynucleotides", <i>Nucl. Acids Res.</i> , 1991, 19(10), 2587-2593	
	AC	Carell, T. et al., "A Novel Procedure for the Synthesis of Libraries Containing Small Organic Molecules", <i>J. Angew. Chem. Int. Ed. Engl.</i> , 1994, 33, 2059-2061	
	AD	Carell, T. et al., "A Solution-Phase Screening Procedure for the Isolation of Active Compounds from a Library of Molecules", <i>Angew. Chem. Int. Ed. Engl.</i> , 1994, 33, 2061-2064	
	AE	Chen et al., "Analogous Organic Synthesis of Small-Compound Libraries: Validation of Combinatorial Chemistry in Small-Molecule Synthesis", <i>J. Am. Chem. Soc.</i> , 1994, 116, 2661-2662	
	AF	Cossy, J. et al., "Formation of Optically Active 3-Hydroxypiperidines", <i>Tetrahedron Letters</i> , 1995, 36(4), 549-552	
	AG	DeWitt, S. et al., "Diversomers": An Approach to Nonpeptide, Nonoligomeric Chemical Diversity", <i>PNAS USA</i> , 1993, 90, 6909-6913	
	AH	Ezquerro, J. et al., "Short and Efficient Enantioselective Synthesis of <i>cis</i> and <i>trans</i> Pyrrolidine-2,5 Dicarboxylic Acids", <i>Tetrahedron Letters</i> , 1993, 34(31), 4989-4992	
	AI	Garegg, P. et al., "Nucleoside Hydrogenphosphonates in Oligonucleotide Synthesis", <i>Chemica Scripta</i> , 1986, 26, 159-62	
	AJ	Farooqui, F. et al., "Effect of Structural Variations in Cholesteryl-Conjugated Oligonucleotides on Inhibitory Activity toward HIV-1", <i>Bioconjugate Chem.</i> , 1991, 2, 422-426	
	AK	Froehler, B., "Deoxynucleoside H-Phosphonate Diester Intermediates in the Synthesis of Internucleotide Phosphate Analogues", <i>Tetrahedron Letters</i> , 1986, 27(46), 5575-5578	
	AL	Froehler, B. et al., "Nucleoside H-Phosphonates: Valuable Intermediates in the Synthesis of Deoxyoligonucleotides", <i>Tetrahedron Letters</i> , 1986, 27(4), 469-472	
<b>EXAMINER</b>		<b>DATE CONSIDERED</b>	

Sheet 2 of 11

<b>Form PTO-1449 Modified</b>  List of Patent and Publications Cited by Applicant (Use several sheets if necessary)  U.S. Department of Commerce Patent and Trademark Office		Docket No. <b>ISIS-2297</b>	Serial No. <b>08/973,381</b>
		Applicant <b>Normand Herbert</b>	
		Filing Date <b>March 25, 1998</b>	Group <b>Not Yet Assigned</b>
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>			
	AM	Gryaznov, S.M. and Sokolova, N.I., "A New Method for the Synthesis of Oligodeoxyribonucleotides Containing Internucleotide Phosphoramidate Bonds", <i>Tetrahedron Letters</i> , 1990, 31, 3205-3208	
	AN	Gryaznov, S. and Potapov, "A New Approach to the Synthesis of Oligodeoxyribonucleotides with Alkylamino Groups Linked to Internucleotide Phosphate Groups", <i>Tetrahedron Letters</i> , 1991, 32(30), 3715-3718	
	AO	Hebert et al., "Synthesis of N-Substituted Hydroxyprolinol Phosphoramidites for the Preparation of Combinatorial Libraries", <i>Tetra. Lett.</i> , 1994, 35(51), 9509-9512	
	AP	Iso, Y. et al., "Synthesis of Viologen-tagged Oligodeoxynucleotides", <i>Tetrahedron Letters</i> , 1992, 33(4), 503-506	
	AQ	Jung, P. et al., "Hybridization of Alternating Cationic/Anionic Oligonucleotides to RNA Segments", <i>Nucleosides &amp; Nucleotides</i> , 1994, 13(6&7), 1597-1605	
	AR	Letsinger, R. et al., "Cationic Oligonucleotides", <i>J. Am. Chem. Soc.</i> , 1988, 110, 4470-4471	
	AS	Look, G. et al., "Trimethylorthoformate: A Mild and Effective Dehydrating Reagent for Solution and Solid Phase Imine Formation", <i>Tetrahedron Letters</i> , 1995, 36(17), 2937-2940	
	AT	Ohlmeyer, M. et al., "Complex Synthetic Chemical Libraries Indexed With Molecular Tags", <i>PNAS USA</i> , 1993, 90, 19022-10926	
	AU	Peterson et al., "Synthesis and Biological Evaluation of 4-Purinylypyrrolidine Nucleosides", <i>J. Med. Chem.</i> , 1991, 34, 2787-2797	
	AV	Pon, R.T., "Solid-Phase Supports in Oligonucleotide Synthesis", <i>Protocols for Oligonucleotides and Analogs: Synthesis and Properties</i> , Chapter 19, Agrawal, S., Ed., Humana Press, 1993	
	AW	Ritter, A. and Miller, "Amino Acid-Derived Chiral Acyl Nitroso Compounds: Diastereoselectivity in Intermolecular Hetero Diels-Alder Reactions", <i>J. Org. Chem.</i> , 1994, 59, 4602-4611	
	AX	Ritter, A. and Miller, "Asymmetric Syntheses of Novel Amino Acids and Peptides from Acylnitroso-Derived Cycloadducts", <i>Tetrahedron Letters</i> , 1994, 35(50), 9379-9382	
<b>EXAMINER</b>		<b>DATE CONSIDERED</b>	

Sheet 3 of 11

<b>Form PTO-1449 Modified</b>  List of Patent and Publications Cited by Applicant (Use several sheets if necessary)  U.S. Department of Commerce Patent and Trademark Office		Docket No. <b>ISIS-2297</b>	Serial No. <b>08/973,381</b>
		Applicant <b>Normand Herbert</b>	
		Filing Date <b>March 25, 1998</b>	Group <b>Not Yet Assigned</b>
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	AY	Saab, N. et al., "Synthesis and Evaluation of Unsymmetrically Substituted Polyamine Analogues as Modulators of Human Spermidine/Spermine-N'-Acetyltransferase (SSAT) and as Potential Antitumor Agents", <i>J. Med. Chem.</i> , 1993, 36, 2998-3004	
	AZ	Samukov, V. et al., "2-(4-Nitrophenyl) sulfonylthoxycarbonyl(Nsc) Group as a Base-Labile $\alpha$ -Amino Protection for Solid Phase Peptide Synthesis", <i>Tetrahedron Letters</i> , 1994, 35(42), 7821-7824	
	BA	Simon, R. et al., "Peptoids: A Modular Approach to Drug Discovery", <i>PNAS USA</i> , 1992, 89, 9367-9371	
	BB	Takahashi et al., "Preparation of New Chiral Pyrrolidine-bisphosphines as Highly Effective Ligands for Catalytic Assymetic Synthesis of R-(-)-Pantolactone", <i>Tetra. Lett.</i> , 1986, 27(37), 4477-4480	
	BC	Takeda et al., "Practical Asymmetric Synthesis of (R)-(-)-Phenylephrine Hydrochloride Catalyzed by (2R, 4R)-MCCPM- Rhodium Complex", <i>Tetra. Lett.</i> , 1989, 30(3), 367-370	
	BD	Verhart, C.G. and Tesser, "New Base-labile Amino-protective Groups for Peptide Synthesis", <i>Recueil des Travaux Chimiques des Pays-Bas</i> , 1988, 107, 621-626	
	BE	Zuckermann, R. et al., "Efficient method for the preparation of peptoids [oligo(N-substituted glycines)] by submonomer solid-phase synthesis", <i>J. Am. Chem. Soc.</i> , 1992, 114, 10646-10647	
EXAMINER		DATE CONSIDERED	

Sheet 4 of 11

<b>Form PTO-1449 Modified</b>  List of Patent and Publications Cited by Applicant (Use several sheets if necessary)  U.S. Department of Commerce Patent and Trademark Office		Docket No. <b>ISIS-2297</b>	Serial No. <b>08/973,381</b>
		Applicant <b>Normand Herbert</b>	
		Filing Date <b>March 25, 1998</b>	Group <b>Not Yet Assigned</b>
<b>OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)</b>			
.....	BF	Achari, <i>et al.</i> , "Facing up to Membranes: Structure/Function Relationships in Phospholipases", <i>Cold Spring Harbor Symposia on Quantitative Biology</i> , 1987, L11, 441-452	
*	BG	Agrawal, S., ed., "Protocols for Oligonucleotides and Analogs", Humana Press, New Jersey, 1993	
	BH	Alul, <i>et al.</i> , "Oxalyl-CPG: A Liable Support for Synthesis of Sensitive Oligonucleotide Derivatives", <i>Nucl. Acids Res.</i> , 1991, 19, 1527-1532	
	BI	Beaucage <i>et al.</i> , "Advances in the Synthesis Oligonucleotides by the Phosphoramidite Approach", <i>Tetra. Lett.</i> , 1992, 48, 2223-2311	
*	BJ	Bodanszky, M., "Principles of Peptide Synthesis", <i>Springer-Verlag, Berlin-New York</i> , 1984	
	BK	Bomalaski, J. <i>et al.</i> , "Human extracellular recombinant phospholipase A <sub>2</sub> induces an inflammatory response in rabbit joints", <i>J. Immunology</i> , 1991, 146, 3904-3910	
	BL	Bouzard, D. <i>et al.</i> , "Fluoronaphthyridines and quinolones as antibacterial agents. 2. synthesis and structure-Activity relationships of new 1-tert-butyl 7-substituted derivatives", <i>J. Med. Chem.</i> , 1990, 33, 1344-1352	
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